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10/525,728

02/25/2005

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EXAMINER

ROST, ANDREW J

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

02/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/525,728 | Applicant(s) PARRINO ET AL. | |
| | Examiner Andrew J. Rost | Art Unit 3753 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/2006, 2/25/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the preliminary amendment filed 2/25/2005. Claims 1-30 have been canceled. Claims 31-60 have been newly added. Presently, claims 31-60 are pending.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the auxiliary element having corresponding notches designed to receive said locating blocks of the valve body (claim 57) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 31-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 31 recites the limitation "the latter" in line 4. There is insufficient antecedent basis for this limitation in the claim. Similarly, claim 59 recites the limitation "the latter" in line 4 and claim 60 recites the limitation "the latter" in line 4.

Claim 37 recites the limitation of "a circular ring of notches of said selector is essentially coaxial with said projection portion, interacting with the latter to delimit a cavity for engagement with said valve body" in lines 1-3. It is unclear as to which element is being referred to as "the latter" and what structural relationship is being claimed regarding "the latter".

Claim 47 recites the limitation "said shut-off element" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 53 recites the limitations "the inner perimetric wall" in line 2 and "the central through cavity" in line 3. There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 31, 32, 35-37, 42, 44-51, 53, 54, 56 and 59 are rejected under 35 U.S.C. 102(b) as being anticipated by Levasseur (4,593,717).

Regarding claim 31, Levasseur discloses a valve assembly having a valve body (33) having an inner cavity (bore 39) and a plurality of accesses (passages in 30, 31, 32), a selector (40, 41) with a stem portion (40) that is rotated within the inner cavity (39) in order to define flow passages (passages are defined by the rotation of the selector to a predetermined position to align desired valve body passages 30, 31, 32 with passages 42, 43, 44, 45 of the selector to allow a desired flow or with wall sections 46, 47, 48 to block a flow of fluid), and an auxiliary element (red marker medium that fills recessed portions at 36, 37, 38, col. 2, lines 51-54) with the auxiliary element providing a positioning means to provide an indication of the operating status of the valve assembly.

In regards to claim 32, Levasseur discloses the selector to have a predetermined number of notches (openings 49, 50, 51, 52) that interact with the positioning means to make it possible to perceive when a predetermined operating position has been reached (the positioning means are visible through the notches of the selector to indicate the operating status of the valve assembly).

In regards to claim 35, Levasseur discloses the notches of the selector are formed in an essentially circular ring of the selector (fig. 2D, 2E).

In regards to claim 36, Levasseur discloses the selector to have a projecting portion (40) that is inserted into the inner cavity of the valve body wherein the rotation of the selector with respect to the valve body and the auxiliary element operates the valve assembly.

In regards to claim 37 (as best understood), Levasseur discloses a circular ring of notches (49, 50, 51, 52) of the selector is coaxial with the projection portion (40) in which the selector is inserted into the inner cavity (39) of the valve body.

In regards to claim 42, Levasseur discloses the auxiliary element to have a central through cavity (auxiliary element in the recessed portions 36, 37, 38 define a circular region with a central through opening).

In regards to claim 44, Levasseur discloses the projecting portion (40) of the selector to be essentially cylindrical and fits in the inner cavity of the valve body.

In regards to claim 45, Levasseur discloses the selector is rotated about an axis of rotation and the projecting portion (40) is cylindrical and has an axis of extension that coincides with the axis of rotation.

In regards to claim 46, Levasseur discloses the projecting portion to have channels (42, 43, 44, 45) that interact with the accesses (passages in 30, 31, 32) to create a desired flow path.

In regards to claim 47, Levasseur discloses the valve body to have at least a first, second and third accesses (passages in 30, 32, 31) with the rotation of the selector to prevent a fluid flow through the valve body (fig. 8-12), to allow flow between the third and second accesses (fig. 3), between the first and second accesses (fig. 4), and between the first and the third accesses (fig. 5).

In regards to claim 48, Levasseur discloses the selector having at least one aperture (49, 50, 51, 52) providing visual access to different portions of the auxiliary element.

In regards to claim 49, Levasseur discloses the auxiliary element being placed on the surface of the valve body with the surface of the valve body facing the selector wherein the auxiliary element has colored portions (red marker medium) to indicate flow paths.

In regards to claims 50 and 51, Levasseur discloses the selector to have a grip portion (41) that is a stiffened rib that extends transversely with respect to the axis of rotation.

In regards to claim 53 (as best understood), Levasseur discloses the valve body has a portion of a wall that passes through the auxiliary element which has a central through cavity (auxiliary element in the recessed portions 36, 37, 38 define a circular region with a central through opening).

In regards to claim 54, Levasseur discloses the valve body to be essentially discoid in shape.

In regards to claim 56, Levasseur discloses the valve body to have a plurality of locating blocks (the locating blocks are filled by the red marker medium of the auxiliary element) to enable the proper placement of the auxiliary element.

Regarding claim 59, Levasseur discloses a valve assembly having a valve body (33) having an inner cavity (bore 39) and a plurality of accesses (passages in 30, 31, 32), a selector (40, 41) with a stem portion (40) that is rotated within the inner cavity (39) in order to define flow passages (passages are defined by the rotation of the selector to a predetermined position to align desired valve body passages 30, 31, 32 with passages 42, 43, 44, 45 of the selector to allow a desired flow or with wall sections 46, 47, 48 to block a flow of fluid), and an auxiliary element (red marker medium that fills recessed portions at 36, 37, 38, col. 2, lines 51-54) with the auxiliary element providing a positioning means to provide an indication of the operating status of the valve assembly wherein the auxiliary element has colored portions (red marker medium) to indicate flow paths.

7. Claims 31-33, 35-37, 40, 42-45, 48-51, and 54-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Haddad, Jr. (3,921,955).

Regarding claim 31, Haddad, Jr. discloses a valve assembly having a valve body (18) having an inner cavity (22, 11) and a plurality of accesses (an inlet and an outlet), a selector (54, 42, 26, 30) with a portion (26, 30) that is rotated within the inner cavity (22,

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11) in order to define flow paths (as plate 30 is rotated, various flow paths are permitted to flow through the valve body or are prevented from flowing through the valve body), and an auxiliary element (38) with the auxiliary element providing a positioning means to provide an indication of the operating status of the valve assembly.

In regards to claim 32, Haddad, Jr. discloses the selector to have a predetermined number of catches and/or notches (46) to interact with the positioning means.

In regards to claim 33, Haddad, Jr. discloses the positioning means to have at least one corresponding catch and/or notch (44).

In regards to claim 35, Haddad, Jr. discloses the notches of the selector to be formed in an essentially circular ring (fig. 1).

In regards to claim 36, Haddad, Jr. discloses the selector to have a projecting portion (26, 30) inserted into the cavity (22, 11) wherein the rotation of the selector causes different operating positions to be reached.

In regards to claim 37 (as best understood), Haddad, Jr. discloses the circular ring of notches of the selector to be coaxial with the projection portion in which the selector is inserted into the inner cavity (22, 11) of the valve body.

In regards to claim 40, Haddad, Jr. discloses the positioning means to have a stop projection (49) to limit the rotation of the selector.

In regards to claim 42, Haddad, Jr. discloses the auxiliary element to have a central through cavity (41).

In regards to claim 43, Haddad, Jr. discloses the positioning means to having a locking catch (44) to interact with notches (46) of the selector, and a stop projection (49) to limit the movement of the selector wherein the locking catch and the stop projection have surfaces facing the central through cavity.

In regards to claim 44, Haddad, Jr. discloses the projection portion to be essentially cylindrical (26 is cylindrical) and at least partially shaped to be complementary to said inner cavity (26 has a complementary shape to inner cavity 22)

In regards to claim 45, Haddad, Jr. the selector is rotated about an axis of rotation and the projecting portion (26) is cylindrical and has an axis of extension that coincides with the axis of rotation.

In regards to claim 48, Haddad, Jr. discloses the selector having at least one aperture (59) so that as the selector is rotated, various areas of the auxiliary element (38) become visible.

In regards to claim 49, Haddad, Jr. discloses the auxiliary element being placed on the surface of the valve body with the surface of the valve body facing the selector wherein the auxiliary element has a graphic symbols (raised block portions 44 and limit stop 49 with the limit stop 49 being visible from above the valve assembly wherein the position of the limit stop relative to the end portions 59a, 59b of the aperture 59 of the selector indicates the positioning of the positioning means within the valve body).

In regards to claims 50 and 51, Haddad, Jr. discloses the selector having a grip (54) that is rotated to operate the valve assembly wherein the grip is a stiffened portion extending transversely to the axis of rotation.

In regards to claim 54, Haddad, Jr. discloses the auxiliary element to be discoid (auxiliary element is essentially a disc).

In regards to claim 55, Haddad, Jr. discloses a fluid-tight seal between the projecting portion and the valve body by means of a seal (seals present at the intersection of 26 and 10 along with 32 and 10).

In regards to claims 56 and 57, Haddad, Jr. discloses the valve body to have several locating blocks (bolts 40) that are received in corresponding notches in the auxiliary member (fig. 2).

In regards to claim 58, Haddad, Jr. discloses the auxiliary element is removable associated with the valve body (auxiliary element is attached by means of bolts 40).

Regarding claim 59, Haddad, Jr. discloses a valve assembly having a valve body (18) having an inner cavity (22, 11) and a plurality of accesses (an inlet and an outlet), a selector (54, 42, 26, 30) with a portion (26, 30) that is rotated within the inner cavity (22, 11) in order to define flow paths (as plate 30 is rotated, various flow paths are permitted to flow through the valve body or are prevented from flowing through the valve body), and an auxiliary element (38) with the auxiliary element providing a positioning means to provide an indication of the operating status of the valve assembly wherein the auxiliary element has a graphic symbols (raised block portions 44 and limit stop 49 with the limit stop 49 being visible from above the valve assembly wherein the position of the limit stop relative to the end portions 59a, 59b of the aperture 59 of the selector indicates the positioning of the positioning means within the valve body).

Regarding claim 60, Haddad, Jr. discloses a valve assembly having a valve body (18) having an inner cavity (22, 11) and a plurality of accesses (an inlet and an outlet), a selector (54, 42, 26, 30) with a portion (26, 30) that is rotated within the inner cavity (22, 11) in order to define flow paths (as plate 30 is rotated, various flow paths are permitted to flow through the valve body or are prevented from flowing through the valve body), and an auxiliary element (38) with the auxiliary element providing a positioning means to provide an indication of the operating status of the valve assembly wherein the selector is essentially a circular ring having a predetermined number of notches (46) that interact with at least one corresponding catch (44) of the positioning means.

8. Claims 31-39, 41, 44-47, 50-52, 54, 56, 58 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Bellotti et al. (4,821,996).

Regarding claim 31, Bellotti et al. disclose a valve assembly having a valve body (50) having an inner cavity (66, 82) and a plurality of accesses (tubes 20, 22, 26), a selector (14) with a portion (110) that is rotated within the inner cavity (82) in order to permit flow through the valve body or prevent flow through the valve body, and an auxiliary element (140) with the auxiliary element providing a positioning means to provide an indication of the operating status of the valve assembly.

In regards to claim 32, Bellotti et al. disclose the selector to have a predetermined number of catches and/or notches (148a-148d) to interact with the positioning means.

In regards to claims 33 and 34, Bellotti et al. disclose the positioning means to be a spring member (elastic) and to have at least one corresponding catch and/or notch (150).

In regards to claim 35, Bellotti et al. disclose the notches of the selector to be formed in an essentially circular ring.

In regards to claim 36, Bellotti et al. disclose the selector having a projecting portion (110) that is designed to be inserted into the inner cavity (groove 82) of the valve body wherein the relative movement of the selector with respect to the valve body and the auxiliary element causing different operating positions.

In regards to claim 37 (as best understood), Bellotti et al. disclose a circular ring of notches (148a-148d) are coaxial with the projection portion wherein a cavity is formed to receive a portion (64) of the valve body (50).

In regards to claim 38, Bellotti et al. disclose a locking catch (150) is provided at an end of the elastic element.

In regards to claim 39, Bellotti et al. disclose the elastic element to have a curved shape (fig. 10B).

In regards to claim 41, Bellotti et al. disclose the positioning means to limit the rotation of the selector to only one direction (col. 10, lines 30-32).

In regards to claims 44 and 45, Bellotti et al. disclose the projecting portion of the selector to be cylindrical and is at least partially shaped to be complementary to said inner cavity (82) wherein the projecting portion and the selector have the same axis of rotation.

In regards to claim 46, Bellotti et al. disclose the projecting portion to have predetermined channels (120) that interact with the access (20, 22, 26) to regulate a flow.

In regards to claim 47, Bellotti et al. discloses the valve body to have at least a first, second and third accesses (passages in 20, 24, 26) with the rotation of the selector to prevent a fluid flow through the valve body (fig. 11B, 11F), to allow flow between the third and second accesses (fig. 11D), between the first and second accesses (fig. 11C), and between the first and the third accesses (fig. 11E).

In regards to claims 50 and 51, Bellotti et al. disclose the selector having a grip (92) with the grip having a plurality of stiffened ribs (fig. 6).

In regards to claim 52, Bellotti et al. disclose the valve body to have an inner perimetric wall (64) forming a portion of the inner cavity wherein an upper portion of the inner perimetric wall is received within the selector.

In regards to claim 54, Bellotti et al. disclose the selector and/or valve body to be discoid.

In regards to claim 56, Bellotti et al. disclose the valve body having at least one locating blocks (144)

In regards to claim 58, Bellotti et al. disclose the auxiliary element is removable from the valve body.

Regarding claim 60 Bellotti et al. disclose a valve assembly having a valve body (50) having an inner cavity (66, 82) and a plurality of accesses (tubes 20, 22, 26), a selector (14) with a portion (110) that is rotated within the inner cavity (82) in order to

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permit flow through the valve body or prevent flow through the valve body, and an auxiliary element (140) with the auxiliary element providing a positioning means to provide an indication of the operating status of the valve assembly wherein the selector has a predetermined number of catches and/or notches (148a-148d) to interact with the positioning means.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Roberts et al. (3,115,896) disclose a valve assembly having multiple inlets with a single outlet having a selector having multiple internal channels. Chen et al. (4,904,245) disclose a valve assembly having multiple flow passages and a rotatable selector and an indicating means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew J. Rost whose telephone number is 571-272-2711. The examiner can normally be reached on 7:00 - 4:30 M-Th and 7:00 - 12:00 Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. J. R./
Examiner, Art Unit 3753
February 14, 2008

/Ramesh Krishnamurthy/
Primary Examiner, Art Unit 3753